

REMARKS

Claims 2 and 12-20 are pending in this application. By this Amendment, claims 2, 14-15 and 18-19 are amended and claims 1 and 3-11 are cancelled. Applicant reserves the right to file a divisional application to pursue the non-elected claims. No new matter has been added.

I. Objection to the Drawings

The Office Action objects to the drawings under 37 C.F.R. §1.83(a) for not showing all claimed elements. Specifically, the Office Action alleges that the "mutual transducer of direct and alternating current" (which connects to the power source in parallel with the load) is not shown. Applicant traverses the objection.

Applicant notes that a mutual transducer of direct and alternating current in parallel with a load is shown, for example, in Fig. 4 as converter 12 (see page 11, lines 18-20 of the specification as filed). Applicant respectfully requests withdrawal of the objection.

II. Claim Rejection under 35 U.S.C. §112

The Office Action rejects claims 2 and 12-20 under 35 U.S.C. §112, second paragraph, as being indefinite. The claims have been amended to overcome the rejection.

Claim 12 is rejected for reciting "said load includes a direct-alternating current inverter in addition to a whole load apparatus." Claim 12 does not recite this passage. The Office Action appears to be referring to claim 14, which includes this passage. Claim 14 has been amended to overcome the rejection.

Applicant respectfully requests withdrawal of the rejection.

III. Claim Rejections under 35 U.S.C. §103(a)

The Office Action (i) rejects claims 2 and 12-19 under 35 U.S.C. §103(a) over U.S. Patent No. 7,061,139 to Young et al. (Young) in view of Japanese Patent Publication No. 2000-341865 to Chishima; and (ii) rejects claim 20 under 35 U.S.C. §103(a) over Young

in view of Chishima, and further in view of U.S. Patent No. 6,295,215 to Faria et al. (Faria). Applicant respectfully traverses the rejections.

Young discloses, as prior art, an "on-line" or "double conversion" uninterruptible power supply (UPS) having a rectifier 120, an inverter 122, and a backup battery 116 (Fig. 1).

The Office Action admits that Young does not disclose (1) a control circuit for controlling an output voltage of the converter to lower below a steady state, (2) to cause the storage battery to discharge at a more limited current than the rated current thereof, (3) to cause the converter to supply a part of load current to the load; and (4) "a judgment circuit that judges the degradation of the storage battery based on a charging time of the storage battery." However, the Office Action alleges that Chishima cures these deficiencies.

Chishima discloses controlling the charging and discharging time for a rechargeable battery 9 (Fig. 1). The Office Action alleges that the section entitled "Problem to be Solved" and "Solution" disclose the claimed judgment circuit. However, the cited sections, quoted in the Office Action at page 6, do not disclose this. Chishima discloses, in the "Problem to be Solved" section, that Chishima's goal is "to reduce the performance degradation of a secondary battery by controlling the discharging time and charging time of the secondary battery based on power-off elapse time and power-on elapse time."

More specifically, Chishima discloses the method of operation in Fig. 3. At step S302 of Fig. 3, the CPU 1 reads a first clock data from clock IC 3 and, at step S303, reads the clock data from the second area of first memory 2 which is a clock data that was stored before the equipment was powered off (paragraphs [0055]-[0056]). At step S304, these time values give the elapsed time of the power off (paragraph [0057]). At step S305, the elapsed time is compared with the predetermined time for recharging the battery (paragraph [0058]). At step S307, the CPU 1 determines whether the potential of the rechargeable battery 9 at power up is above a predetermined value. If it is, the battery is ok, otherwise, the battery is degraded

(paragraphs [0060]-[0061]). Thus, Chishima does not judge degradation based on a recharge time, but rather whether rechargeable battery 9 is beyond a predetermined value given a power off-power on situation.

In contrast, claim 2 is directed to a judgment circuit that judges the degradation of the storage battery based on a charging time of the storage battery. This is supported, for example, in the specification at page 12, line 20 through the end of the specification and in Fig. 3(C).

Thus, the manner in which Chishima charges the secondary battery is quite different from the claimed judgment circuit. Thus, Chishima fails to cure the deficiencies of Young.

For the foregoing reasons, Applicant respectfully requests withdrawal of the rejections.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



William P. Berridge
Registration No. 30,024

Jonathan H. Backenstose
Registration No. 47,399

WPB:JHB/jhb

Date: March 15, 2007

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--